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## U. S. DEPARTMENT OF AGRICULTURE,

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### SIMPLE DIRECTIONS FOR MAKING COTTAGE CHEESE ON THE FARM.

Cottage cheese furnishes a convenient and economical means of using skim milk as human food. It can be easily made on a small scale and requires no special equipment. The cheese is nutritious and can be used in a number of ways as a substitute for meat. Each pound of cottage cheese furnishes as much protein or body-building material as the same weight of beef. It is, however, not quite so rich in its energy supply as meat.

Because of its ease in making it is desirable to make the cheese often so that it may be eaten fresh, although if it is kept cool it will keep well for several days.

#### SETTING.

Select as much good skim milk as will be needed for a two or three days' supply. Each gallon of skim milk will make about 1½ pounds of cheese. The skim milk should first be placed in a pail or a "shotgun" can, warmed to 75° F., and allowed to stand at that temperature until curdled. A thermometer should always be used; never guess at the temperature. The temperature can be controlled by keeping the pail or can of milk in a tub, sink, or other vessel filled with water of the same temperature.

The time required for curdling will depend upon the freshness of the milk. When a starter or good sour milk is available a better and more uniform cheese can be made and the time for curdling lessened. About a cupful of starter or good sour milk to the gallon of skim milk is sufficient, although more may be used. With that quantity of starter the skim milk will curdle in from 10 to 15 hours, while without starter, fresh milk may not curdle for 24 hours or even longer. The greater the quantity of starter the sooner curdling will take place. During the setting no special attention is necessary. As soon as a firm, smooth curd has been formed, it is ready for cutting.

#### CUTTING, HEATING, AND STIRRING.

The curd is cut into 1-inch or 2-inch squares with a long-bladed knife. The temperature of the curdled milk (or coagulum) is then

raised to 100° F., and the mass stirred gently from time to time. When that temperature has been maintained for about half an hour the curd is ready to be drained. The degree of heating largely determines the dryness of the cheese; the higher the temperature the drier the cheese will be.

#### DRAINING.

After heating, the curd is poured into a cheesecloth sack or into a piece of draining cloth thrown over a pail. If a pail is used it will be necessary to pour out the whey occasionally so that draining will continue. In 15 or 20 minutes the curd will become mushy and will drain more slowly. The sides of the cloth may then be raised and lowered every few minutes to hasten draining. When the curd is rather firm and the whey has nearly ceased to flow it is ready for salting, although tastes differ somewhat, some preferring a dry while others a soft, moist cheese.

#### SALTING.

The cheese should be salted to suit the taste. Usually, however, from one to two teaspoonfuls to the gallon of milk is about the quantity desired. The salt may be sprinkled over the curd and worked in with a spoon or a paddle. The cheese is then ready to eat.

#### MAKING CHEESE WITH RENNET OR PEPSIN.

Cottage cheese made with rennet, a junket tablet, or pepsin has a finer and more uniform texture and requires less time and attention in making. Any one of these will cause the milk to curdle sooner. The process of making is the same as already described, except that the milk is warmed to 80° F. and allowed to remain at that temperature for 5 or 6 hours, at which time 2 or 3 drops of liquid rennet per gallon of milk are diluted in a tablespoonful of cold water and stirred into the milk. When rennet is not available, one-eighth of a junket tablet to a gallon of milk may be dissolved in a tablespoonful of cold water and stirred into the milk. Powdered pepsin may be used for the same purpose, a quantity that will remain upon the point of a penknife being dissolved in a tablespoonful of cold water and then mixed with the milk.

When rennet, a junket tablet, or pepsin is used the coagulum is placed in a drain cloth without cutting or heating. A finer and heavier draining cloth is necessary because of the fineness of the curd. The cheese is salted as already described.

#### PASTEURIZATION OF THE MILK.

While for small-scale operation the pasteurization of skim milk may not always be practicable, it permits a better control of the fer-

mentation, increases the yield of cheese, and renders the product safe from disease-producing organisms. With pasteurized milk it is absolutely necessary to use a starter.

#### QUALITY.

Cottage cheese is judged by its flavor and texture. A high-quality cheese should have a clean, mild, acid flavor and a texture smooth, free from lumps, and uniform or homogenous throughout. Flavor can be controlled by the use of clean, sweet skim milk and a good starter, but texture largely depends upon careful manipulation during the making process.

Sweet or sour cream added to cottage cheese makes a richer and more palatable product.

If the cheese is to be kept for several days it should be stored in an earthenware or glass vessel rather than in one of tin or wood. It should be stored in a cold place, thereby it will keep longer without becoming sour or moldy.

